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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,526	12/05/2003	Stephen J. Kramer	2269-4371.1US (00-0118.01)	8284
24247	7590	06/15/2004	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			MCDONALD, SHANTESE L	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/728,526	KRAMER, STEPHEN J.	
	Examiner	Art Unit	
	Shantese L. McDonald	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/5/03, 3/5/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Klun et al.

Klun et al. teaches a method for fabricating an apparatus for conditioning a polishing pad comprising, providing a quantity of an abrasive material, (col. 18, lines 51-55), which are abrasive particles having a dimension of about 25 to 500 μm , (col. 18, lines 64-67), that is degradable or dissolvable by at least one chemical that does not substantially degrade or dissolve a material of a polishing pad to be conditioned, and forming a conditioning surface, by providing a substrate that comprises at least one of a polymer, a metal, a ceramic, paper, a paper-like material or a fabric, (col. 17, lines 54-59). Klun et al. also teaches at least partially impregnating the supporting substrate with the abrasive particles, by disposing at least some of the abrasive particles adjacent the conditioning surface, completely embedding at least some of the abrasive particles within the supporting substrate, and the conditioning surface comprising a pattern of abrasive material, (col. 17, line 1- col. 18, line 67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klun et al. in view of Bange et al.

Klun et al. teaches all the limitations of the claims except for the abrasive material comprises providing a quantity of at least one of silicon dioxide, iron, an iron alloy, copper, nickel, and tungsten, securing linear filaments in substantially parallel relation to one another, comprising an abrasive material, in a ductile material to the supporting substrate, and forming a brush. Bange et al. teaches providing an abrasive material that comprises a quantity of and iron alloy, (col. 18, line 1), securing linear filaments in substantially parallel relation to one another, comprising an abrasive material, in a ductile material to the supporting substrate, and forming a brush, (col. 18, line 27 – col. 19, line 55). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to provide method of Klun with providing abrasive filaments, as taught by Bange et al, in order to provide various forms of conditioning elements.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klun in view of Proffitt.

Klun teaches all the limitations of the claims except for patterning the abrasive by forming a mask over the abrasive material and contacting the regions of the abrasive

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material exposed through the mask to an etchant to at least partially removes the regions through the mask. Proffitt teaches a method of forming a pattern on a continuous coating by forming a mask over the abrasive material, (col. 1, lines 24-27), and contacting the regions of the abrasive material exposed through the mask to an etchant, (col. 1, lines 47-50), to at least partially removes the regions through the mask. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to utilize the method of forming patterns as taught by Proffitt, to form the patterns of Klun, in order to efficiently form the desired patterns.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Valdsaar, Kirchner et al. and Zimmer et al. were cited to show other examples of conditioners.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese L. McDonald whose telephone number is (703) 308-8722. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Joseph J. Hail, III".

S.L.M.
June 3, 2004

Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700